Team Brokers

IIT PATNA

The Problem

Investors and analysts often struggle with incomplete financial assessments, leading to misjudged investments and missed opportunities. Traditional methods fail to capture long-term stability, risk exposure, and profitability drivers, making it difficult to compare companies effectively.

We are addressing this challenge by conducting a comprehensive financial health check, analyzing key metrics like liquidity, profitability, efficiency, solvency, and valuation. Through Benjamin Graham's investment principles and DuPont Analysis, we break down financial performance and risk factors, uncovering true strengths and weaknesses.

To make insights more accessible, we are building an interactive financial dashboard, allowing for real-time comparisons of two competing companies. By structuring our analysis with data-driven precision, we empower investors to make informed decisions, identify sustainable growth opportunities, and mitigate financial risks.



Companies Selected & Why

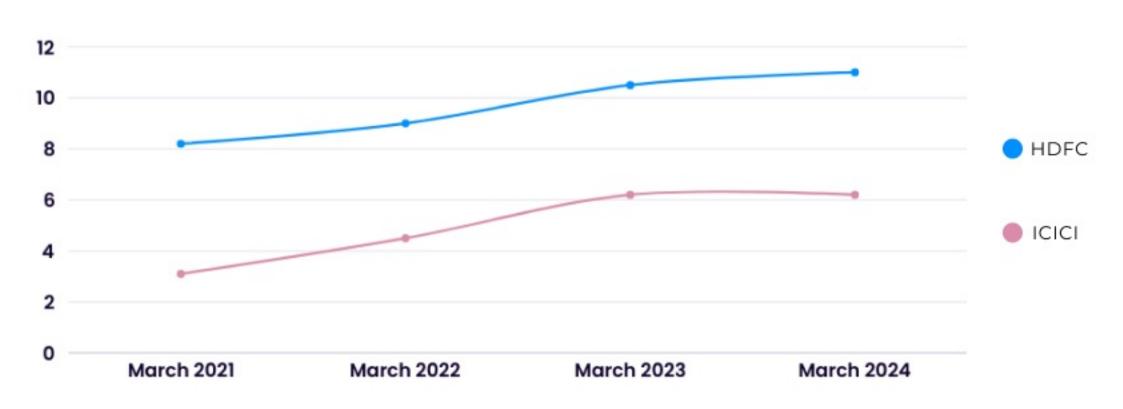
- Both ICICI Bank and HDFC Bank are key players in India's banking and financial services industry, contributing significantly to the country's economic growth.
- They have a strong retail and corporate banking presence, offering services like loans, wealth management, and digital banking solutions.
 - Given their dominance, they serve as a benchmark for comparing financial performance within the sector.

- ICICI Bank
- · 2nd largest private bank in India.
- Market Cap: ₹8.4 trillion (2024).
 - · Strong in retail lending.
- · Expanding globally in 17+ countries.

HDFC Bank

- Largest private bank by market cap.
 - Market Cap: ₹12.1 trillion (2024).
- Stable growth with lowest NPAs.
- Leader in home, car, and SME loans.

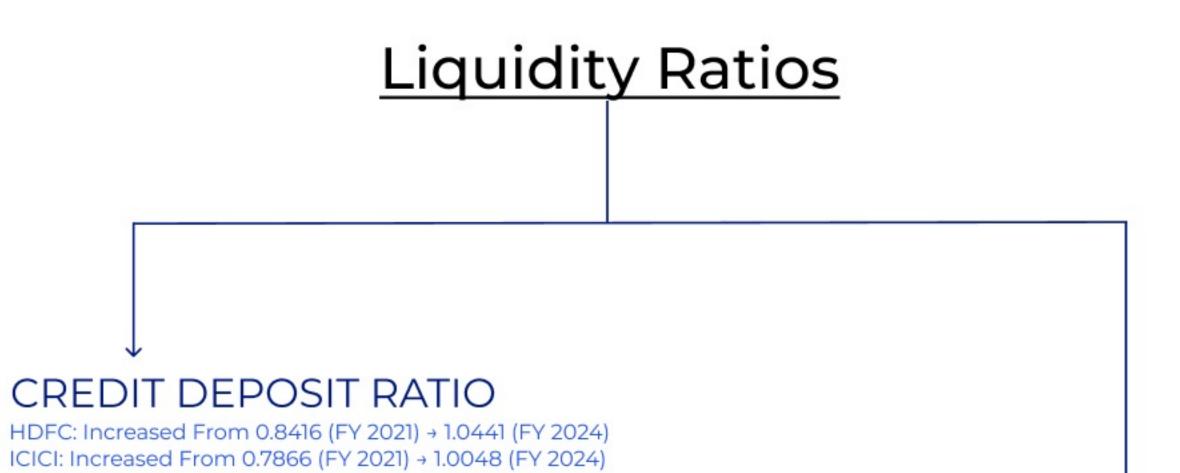
- ICICI Bank has a more aggressive growth strategy, focusing on expanding its loan book, digital transformation, and higher-risk lending.
- HDFC Bank is known for its conservative approach, maintaining strong asset quality, steady profitability, and disciplined risk management.
 - By comparing these two banks, we can analyze how different strategies impact financial stability and long-term growth.



Market capitalization data for ICICI Bank and HDFC Bank

Financial ratios

Inference:



NET INTEREST MARGIN (NIM)

HDFC: Declined From 3.83% (FY 2021) → 3.41% (FY 2024) ICICI: Declined From 5.31% (FY 2021) → 4.36% (FY 2024)

Inference:

Both Banks Are Facing Margin Compression, Possibly Due To Rising Borrowing Costs Or Lower Lending Rates. ICICI Still Maintains A Stronger Margin Compared To HDFC.

Profitability Ratios

Both Banks Have Increased Lending Compared To Deposits.

 HDFC's Ratio Exceeding 1.0 In FY 2024 Suggests Higher Risk If Defaults Rise.

LIQUID ASSETS/TOTAL ASSETS RATIO

HDFC: Fluctuated From 0.2939 (FY 2021) → 0.2421 (FY 2024) ICICI: Increased From 0.3367 (FY 2021) → 0.4765 (FY 2024)

Inference:

 ICICI Has Improved Its Liquidity Reserves, Ensuring Financial Stability.

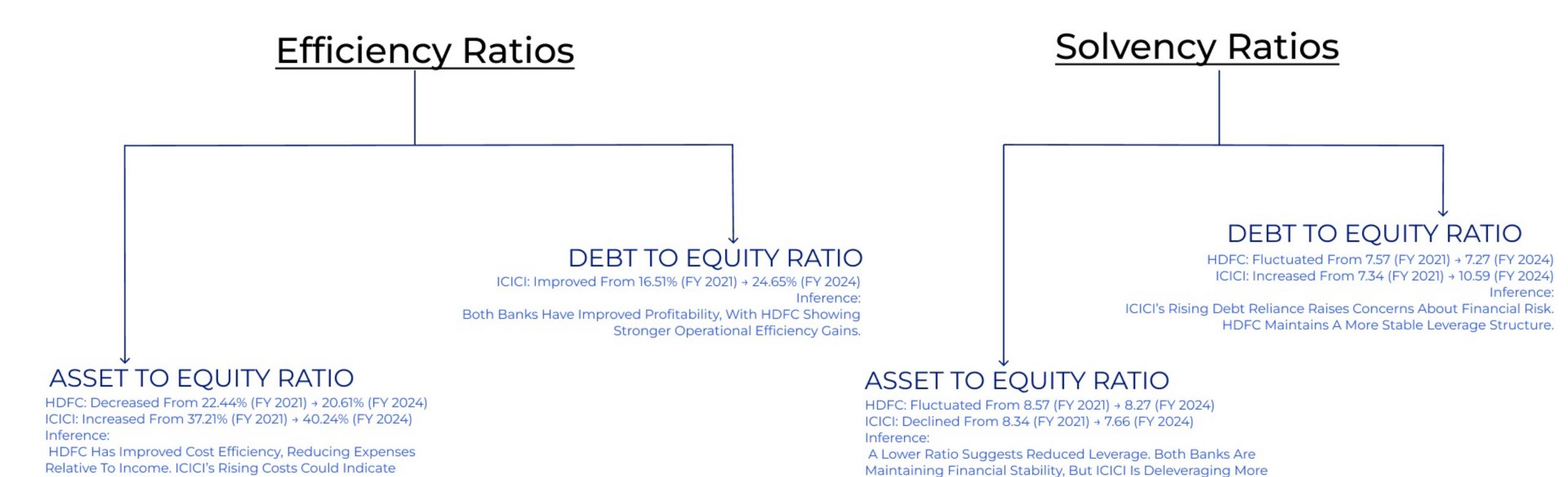
 HDFC's Decline Suggests Reduced Liquidity Buffers, Which May Limit Flexibility.

RETURN ON ASSETS (ROA)

HDFC: Stable Around 1.78% (FY 2021) → 2.0% (FY 2024) ICICI: Increased From 1.32% (FY 2021) → 2.398% (FY 2024)

Inference:

ICICI Has Significantly Improved Asset Efficiency, Generating Higher Returns Per Asset. HDFC Remains Stable But Lags Behind ICICI In Maximizing Asset Returns.



Aggressively.

Operational Inefficiencies.

Valuation Ratios

PRICE TO BOOK VALUE

HDFC: Declined From 4.7 (FY 2021) → 2.61 (FY 2024)
ICICI: Increased From 2.71 (FY 2021) → 5.82 (FY 2024)
Inference:

ICICI's Rising PBV Suggests Strong Investor Confidence But Could Signal Overvaluation. HDFC's Decline Reflects A More Conservative Valuation.

PRICE TO EARNINGS RATIO

HDFC: Declined From 30.82 (FY 2021) → 17.61 (FY 2024) ICICI: Fluctuated From 24.04 (FY 2021) → 22.51 (FY 2024) Inference:

HDFC's Lower PE Suggests Improved Earnings Relative To Stock Price, Making It Potentially Undervalued. ICICI's Fluctuations Indicate Investor Uncertainty.

Valuation Ratios

PRICE TO BOOK VALUE

HDFC: Declined From 4.7 (FY 2021) → 2.61 (FY 2024) ICICI: Increased From 2.71 (FY 2021) → 5.82 (FY 2024) Inference:

ICICI's Rising PBV Suggests Strong Investor Confidence But Could Signal Overvaluation. HDFC's Decline Reflects A More Conservative Valuation.

PRICE TO EARNINGS RATIO

HDFC: Declined From 30.82 (FY 2021) → 17.61 (FY 2024) ICICI: Fluctuated From 24.04 (FY 2021) → 22.51 (FY 2024) Inference:

HDFC's Lower PE Suggests Improved Earnings Relative To Stock Price, Making It Potentially Undervalued. ICICI's Fluctuations Indicate Investor Uncertainty.

ICICI vs HDFC Comparision

| Category | ICICI (FY 2024) | HDFC (FY 2024) | Better Bank |
|---------------|---|---|--|
| Liquid | High lending (CD Ratio = 1.0048) but strong liquid assets | Lower lending (CD Ratio = 1.0441) but lower liquid assets | ICIC for Liquidity |
| Profitability | Higher NIM (4.36%) and ROA (2.398%) | Lower NIM (3.41%) and ROA (2%) | ICIC is more Profitable |
| Efficiency | Higher cost-to-income (40.24%) | Lower cost-to-income (20.61%) | HDFC is more Efficient |
| Valuation | Higher P/B (5.82) and PE (22.51) | Lower P/B (2.61) and PE (17.61) | ICIC is more expensive HDFC is undervalued |

Final Verdict on HDFC Bank

Benjamin Graham's Perspective

| | PHASE 1 (ONBOARDING) | | PHASE 2 (ASSEMBLING) | | PHASE 3 (DEPLOYMENT) |
|------------------------|-----------------------------|---|------------------------------------|---|----------------------|
| | | | | | |
| EARNING CONSISTENCY | STABLE AND GROWING EARNINGS | | IMPROVING ROA, BUT DECLINING NIM | | ☑ PASS |
| | | | | | |
| DEBT LEVELS | LOW DEBT-TO-EQUITY (<1) | 4 | HIGH LEVERAGE (7.27) | | X FAIL |
| | | | | ١ | |
| INTRINSIC VALUE | P/B < 1.5 & P/E < 15 | | OVERVALUED (P/B: 2.61, P/E: 17.61) | | X FAIL |
| | | | | ١ | |
| DIVIDEND STABILITY | REGULAR DIVIDEND PAYMENTS | | CONSISTENT AND STABLE | | ☑ PASS |

Final Verdict on ICICI Bank

Benjamin Graham's Perspective

| | PHASE 1 (ONBOARDING) | PHASE 2 (ASSEMBLING) | PHASE 3 (DEPLOYMENT) |
|------------------------|-----------------------------|------------------------------------|----------------------|
| | | | |
| EARNING CONSISTENCY | STABLE AND GROWING EARNINGS | IMPROVING ROA, BUT DECLINING NIM | ☑ PASS |
| | | | |
| DEBT LEVELS | LOW DEBT-TO-EQUITY (<1) | HIGH (10.59) | X FAIL |
| | | | |
| INTRINSIC VALUE | P/B < 1.5 & P/E < 15 | OVERVALUED (P/B: 5.82, P/E: 22.51) | X FAIL |
| DIVIDEND STABILITY | | | |
| | REGULAR DIVIDEND PAYMENTS | CONSISTENT BUT LOW DIVIDENDS | ☑ PASS |

Calculation For Graham Score

Graham-Adjusted Fundamental Score (GAFS)
The Graham-Adjusted Fundamental Score (GAFS) is calculated as follows:

GAFS = 0.2 × EPS Growth + 0.15 × Debt Score +

0.10 × Interest Coverage + 0.10 × P/E Score +

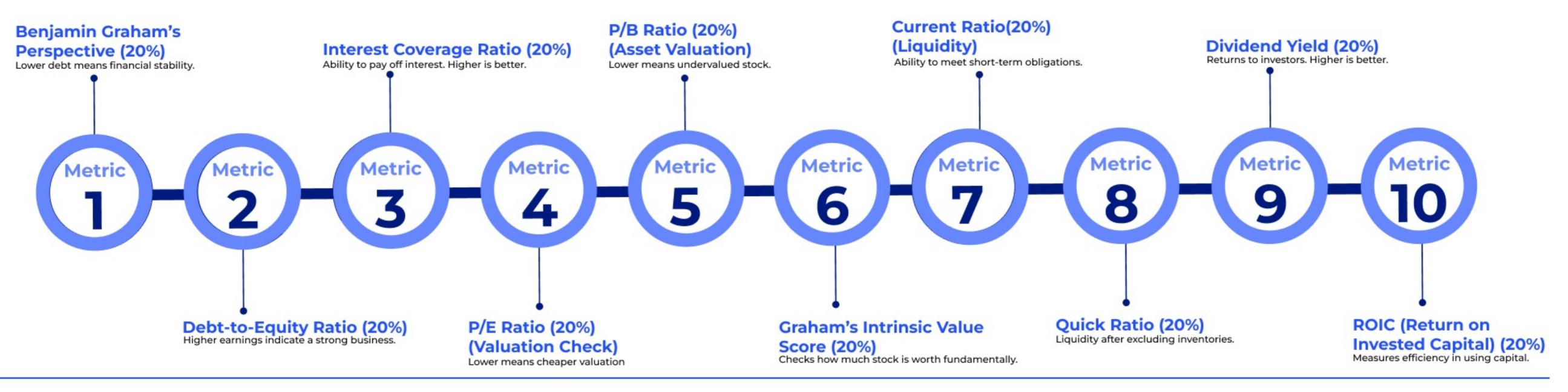
0.10 × P/B Score + 0.15 × Intrinsic Value Score +

0.05 × Current Ratio + 0.05 × Quick Ratio +

0.05 × Dividend Yield + 0.05 × ROIC

Each metric is weighted based on its importance in assessing a company's overall financial health.

Benjamin Graham's Intrinsic Value estimates a stock's true worth. It is compared to the current share price to assess valuation. If Intrinsic Value > Share Price, the stock is undervalued (good buy). If Intrinsic Value < Share Price, the stock is overvalued (may be risky).



Conclusion







HDFC Bank demonstrates stronger financial stability and profitability compared to ICICI Bank. HDFC's lower debt-to-equity ratio (7.27 vs. 10.59) and a higher asset-to-equity ratio (8.27 vs. 7.66) indicate a more conservative approach to leverage, making it less risky during economic downturns. In terms of earnings quality, HDFC maintains a steadier Return on Assets (ROA), improving from 1.78% to 2.0%, whereas ICICI, despite growing from 1.32% to 2.398%, has had more volatility. While both banks are experiencing a decline in Net Interest Margin (NIM) due to market conditions, HDFC's drop (3.83% → 3.41%) is less severe compared to ICICI's sharp fall (5.31% → 4.36%), suggesting more resilience in core banking profitability. Additionally, HDFC has a more stable operating profit margin, reinforcing its position as the stronger bank in fundamental aspects.